

Case 3553***Helix atlantica* Morelet & Drouët, 1857 (currently *Oxychilus (Drouetia) atlanticus*; Gastropoda, Pulmonata): proposed conservation of current usage by designation of a neotype**

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Abstract. The purpose of this application, under Article 75.6 of the Code, is to conserve the current usage of the name *Helix atlantica* Morelet & Drouët, 1857 (currently *Oxychilus (Drouetia) atlanticus*) for a species of pulmonate gastropod by designating a neotype. The syntypes of this species housed in the Natural History Museum, London are not in taxonomic accord with the prevailing usage. Originally *H. atlantica* was said to occur in most islands of the archipelago of the Azores, but later this name was uniformly used for specimens from São Miguel Island only, while the syntypes are from Santa Maria Island. We request the Commission use its plenary power to set aside the existing name-bearing types and to designate a neotype from São Miguel Island, to conserve the prevailing usage and concept of the species.

Keywords: Nomenclature; taxonomy; *Helix*; *Helix atlantica*; *Oxychilus atlanticus*; pulmonate gastropods; Azores.

1. Morelet & Drouët (1857) briefly described 12 species of land molluscs collected during their expedition to the Azores without providing occurrence data, which were

added later by Morelet (1860). Morelet (1860, p. 168) stated that although *Helix atlantica* Morelet & Drouët, 1857 occurs on most islands of the archipelago, it is particularly abundant in São Miguel. Moreover, Morelet & Drouët (1857, p. 149) mentioned in the description a size of 8 mm, but Morelet (1860, p. 169) observed that the specimens of *H. atlantica* from Santa Maria (12 mm) and Faial (6 mm) differed somewhat from those of São Miguel.

2. More than a century later, Riedel (1964) used anatomical evidence from specimens collected by the Lund Expedition to the Azores in 1957 to corroborate and formalise Morelet's (1860) claims, by regarding the populations of *H. atlantica* from Faial and some from Santa Maria as subspecies of the typical form of the species from São Miguel. Riedel (1964, p. 31) raised Morelet's (1860, p. 168) variety β *minor* from Faial to subspecific status maintaining Morelet's (1860) authorship. However, from specimens of a smaller size (7 mm) than that given by Morelet & Drouët (1857) for the type of *Helix atlantica*, Riedel (1964, p. 34) described a new subspecies for Santa Maria, viz. *Oxychilus atlanticus brincki*, suggesting the possibility that the 12 mm specimens mentioned by Morelet (1860, p. 169) could belong to a new form. The holotype of *O. a. brincki* is deposited at the Institute of Zoology of the Lund University, Sweden (Riedel, 1964, p. 7). Finally, Riedel (1980) emphasised the separation of these subspecific taxa by raising them to specific level, a decision that since then has been consistently applied (e.g. Martins, 1989, 1991, 1999, 2005; Martins et al., 1991, 2006; Brito, 1992; Cunha et al., 1993, 2001, 2005, 2010; Rodrigues et al., 1998, 2002, 2003; Rodrigues & Gómez, 1999; Gómez & Rodrigues, 2000; Bank et al., 2002; Rodrigues & Martins, 2003; Cameron et al., 2007).

3. This taxonomic practice, however, entails a nomenclatural problem, as the three specimens labelled syntypes of '*Helix atlantica*' from Morelet's collection deposited at the Natural History Museum, London (BMNH 93.2.4.996-8) are from Santa Maria. Inspection of this material revealed that one of these specimens corresponds to *Oxychilus (Drouetia) brincki* Riedel, 1964, while the other two belong to an undescribed species. Riedel (1964) did not consider these syntypes. Because the specimens he had at hand were much smaller (7 mm) than the variety mentioned by Morelet (1860) (12 mm), he assumed that the latter could belong to another form, and proceeded to select a holotype for *Oxychilus (Drouetia) atlanticus brincki* from the material collected by the Lund Expedition in 1957 (Riedel, 1964, pp. 27–34). Obviously, by this action and by explicitly restricting the type locality of *Helix atlantica* to São Miguel ['Terra typica: Azoren (Insel São Miguel, restr.)'], while regarding the Santa Maria populations as a different species, Riedel (1964, 1980) introduced a nomenclatural problem, as all existing syntypes of '*Helix atlantica* Morelet & Drouët, 1857' came from Santa Maria. De Winter (1989) recognised the variability of the taxon in São Miguel by describing *Oxychilus (Drouetia) batalhanus* and subsequent research (Martins, 1991, 2005; Martins et al., 2010) has shown that *Drouetia* in São Miguel is a complex of several anatomically closely related taxonomic units. Use of the Principle of Priority to relegate de Winter's name to synonymy is not justifiable, for there are other taxonomic units involved in *O. (D.) atlanticus*. The designation of a neotype for *Helix atlantica* linking the name to one of these taxonomic units is, therefore, needed to fix the true identity of the taxon. The proper identification of these endemic taxonomic units throughout the island,



Fig. 1. Neotype of *Helix atlantica* Morelet & Drouët, 1857. Collected at Lagoa Verde, Sete Cidades, São Miguel, Açores, Portugal; 11-11-2010; AM de Frias Martins coll. Deposited at the Natural History Museum, London (NHMUK 20100653). Scale bar = 1 mm.

sometimes confined to small areas, will impact on the development of conservation policies, thus reinforcing the need to designate appropriate type material.

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for *Helix atlantica* Morelet & Drouët, 1857 and to designate specimen NHMUK 20100653, deposited at the Natural History Museum, London as the neotype;
- (2) to place on the Official List of Specific Names in Zoology the name *atlantica* Morelet & Drouët, 1857, as published in the binomen *Helix atlantica* and as defined by the neotype designated in (1) above.

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